What is claimed is:

1. A radially expandable stent comprising a wire having a substantially uniform hydrogel coating layer thereon.

2. The stent of claim 1 wherein the layer has an average dry coating thickness of about 0.01 micrometer to about 25 micrometers.

3. The stent of claim 1 wherein the thickness of the coating has a relative standard deviation of no greater than about 10 percent.

4. The stent of claim 1 wherein the layer further comprises a biologically active agent.

5. The stent of claim 4 wherein the biologically active agent comprises a substance selected from the group consisting of dipyridamole, heparin, anti-platelet drugs, anti-thrombogenic drugs, anti-proliferative drugs, anti-mitotic drugs, and combinations thereof.

6. The stent of claim 1 wherein the layer provides a hydrophilic surface.

7. The stent of claim 1 wherein the layer provides a biocompatible surface.

8. A radially expandable stent comprising a wire having a hydrogel coating layer thereon, wherein the stent is preparable by a method comprising:

providing a metal wire;

applying to the wire a solution that includes a solvent and a water soluble polymer in the solvent;

evaporating the solvent to provide a polymeric coating on the wire;

crosslinking the polymeric coating to provide a hydrogel coating layer on the wire; and

fabricating the coated wire into a cylindrical, radially expandable stent body.

9. The stent of claim 8 wherein the solution is applied to the wire by a continuous coating method.

10. The stent of claim 9 wherein the continuous coating method comprises passing the wire through the solution at a substantially constant speed.

11. The stent of claim 8 wherein the hydrogel coating layer is swollen with an aqueous fluid prior to fabricating the coated wire into a stent.

12. A method for making a radially expandable intravascular stent comprising:

providing a metal wire;

applying to the wire a solution that includes a solvent and a water soluble polymer in the solvent;

evaporating the solvent to provide a polymeric coating on the wire;

crosslinking the polymeric coating to provide a hydrogel coating layer on the wire; and

fabricating the coated wire into a cylindrical, radially expandable stent body.

13. The method of claim 12 wherein the solution is applied to the wire by a continuous coating method.

14. The method of claim 13 wherein the continuous coating method comprises passing the wire through the solution at a substantially constant speed.

15. The method of claim 12 wherein the hydrogel coating layer is swollen with an aqueous fluid prior to fabricating the coated wire into a stent.

16. The method of claim 12 wherein the hydrogel coating layer has an average dry coating thickness of about 0.01 micrometer to about 25 micrometers.

17. The method of claim 12 wherein the thickness of the hydrogel coating layer has a relative standard deviation of no greater than about 10 percent.

18. A method for delivery of a biologically active agent to the interior of a body lumen comprising:

providing a metal wire;

applying to the wire a solution that includes a solvent, a water soluble polymer in the solvent, and a biologically active agent dispersed in the solvent;

evaporating the solvent to provide a polymeric coating on the wire;

crosslinking the polymeric coating to provide a hydrogel coating layer on the wire;

fabricating the coated wire into a cylindrical, radially expandable stent body;

introducing the stent body transluminally into a selected portion of the body lumen; and

radially expanding the stent body into contact with the body lumen.

19. A method for delivery of a biologically active agent to the interior of a body lumen comprising:

providing a metal wire;

applying to the wire a solution that includes a solvent and a water soluble polymer in the solvent;

evaporating the solvent to provide a polymeric coating on the wire;

crosslinking the polymeric coating to provide a hydrogel coating layer on the wire;

fabricating the coated wire into a cylindrical, radially expandable stent body;

applying a biologically active agent to the hydrogel coating layer;

introducing the stent body transluminally into a selected portion of the body lumen; and

radially expanding the stent body into contact with the body lumen.

20. A method of modifying cellular response in a body lumen to a disease, injury, or foreign body, comprising:

providing a metal wire;

applying to the wire a solution that includes a solvent, a water soluble polymer in the solvent, and a biologically active agent dispersed in the solvent;

evaporating the solvent to provide a polymeric coating on the wire;

crosslinking the polymeric coating to provide a hydrogel coating layer on the wire;

fabricating the coated wire into a cylindrical, radially expandable stent body;

introducing the stent body transluminally into a selected portion of the body lumen;

radially expanding the stent body into contact with the body lumen; and

controllably releasing the biologically active agent into the body lumen.

21. A method of modifying cellular response in a body lumen to a disease, injury, or foreign body, comprising:

providing a metal wire;

applying to the wire a solution that includes a solvent and a water soluble polymer in the solvent;

evaporating the solvent to provide a polymeric coating on the wire;

crosslinking the polymeric coating to provide a hydrogel coating layer on the wire;

fabricating the coated wire into a cylindrical, radially expandable stent body;

applying a biologically active agent to the hydrogel coating layer;

introducing the stent body transluminally into a selected portion of the body lumen;

radially expanding the stent body into contact with the body lumen; and

controllably releasing the biologically active agent into the body lumen.